

CLAIMS

1. A content acquisition method comprising:

a request information transmission step of transmitting request information to an external section in response to a request for content data, said request information requesting address information of a plurality of content provision apparatus capable of providing said content data, and data size information of said content data;

an information reception step of receiving from said external section said address information of said plurality of content provision apparatus capable of providing said content data, and said data size information of said content data, after transmitting said request information;

a division position determination step of determining division start positions and division end positions specifying division parts of said content data to request said content data in divided form from said plurality of content provision apparatus, based on the number of pieces of said address information and said data size information received by said information reception step;

a division part request information transmission step of transmitting division part request information including content identification information of said content data, and said division start positions and division end positions of said division parts of said content data, such that each said division part is requested from different said content provision apparatus;

a division part reception step of receiving said division parts from said plurality of content provision apparatus after

transmitting said division part request information;

a temporarily storing step of temporarily storing said division parts received by said division part reception step; and

a data restoring step of combining said division parts temporarily stored by said temporarily storing step to restore said content data.

2 The content acquisition method according to claim 1, further comprising:

a measurement step of measuring a reception completion period of time for each said content provision apparatus, said reception completion period of time representing a period between transmission of said division part request information and reception of said division parts from each said content provision apparatus;

a reception stop step of stopping to receive said division part from said content provision apparatus when said division part has not been received yet from said content provision apparatus at a time a certain period of time has passed since the start of measuring said reception completion period of time; and

a division part request apparatus switch step of switching from said content provision apparatus from which said reception stop step stopped halfway to receive said division part to different said content provision apparatus to request said division part therefrom.

3. The content acquisition method according to claim 2, further comprising:

a reception status update step of sequentially updating a reception end position of each said division part as reception status, while receiving said division parts from said plurality of content provision apparatus; and

a reception remnant part request information transmission step of transmitting reception remnant part request information to the content provision apparatus different from said content provision apparatus from which said reception stop step stopped halfway to receive said division part to request a reception remnant part which is a part of said division part not received completely, said reception remnant part request information including said content identification information, and said reception end position and division end position of said division part not received completely.

4. A content acquisition apparatus comprising:

request information transmission means for transmitting request information to an external section in response to a request for content data, said request information requesting address information of a plurality of content provision apparatus capable of providing said content data, and data size information of said content data;

information reception means for receiving from said external section said address information of said plurality of content provision apparatus capable of providing said content data, and said data size information of said content data, after said request information transmission means transmits said request information;

division position determination means for determining division start positions and division end positions specifying division parts of said content data to request said content data in divided form from said plurality of content provision apparatus, based on the number of pieces of said address information and said data size information received by said information reception means;

division part request information transmission means for transmitting division part request information including content identification information of said content data, and said division start positions and division end positions of said division parts of said content data, such that each said division part is requested from different said content provision apparatus;

division part reception means for receiving said division parts from said plurality of content provision apparatus after said division part request information transmission means transmits said division part request information;

temporarily storing means for temporarily storing said division parts received by said division part reception means; and

data restoring means for combining said division parts temporarily stored by said temporarily storing means to restore said content data.

5. The content acquisition apparatus according to claim 4, further comprising:

measurement means for measuring a reception completion period of time for each said content provision apparatus, said reception completion period of time representing a period between

transmission of said division part request information and reception of said division parts from each said content provision apparatus;

reception stop means for stopping to receive said division part from said content provision apparatus when said division part has not been received yet from said content provision apparatus at a time a certain period of time has passed since the start of measuring said reception completion period of time; and

division part request apparatus switch means for switching from said content provision apparatus from which said reception stop means stopped halfway to receive said division part to different said content provision apparatus to request said division part therefrom.

6. The content acquisition apparatus according to claim 5, further comprising:

a reception status update means for sequentially updating a reception end position of each said division part as reception status, while receiving said division parts from said plurality of content provision apparatus; and

a reception remnant part request information transmission means for transmitting reception remnant part request information to the content provision apparatus different from said content provision apparatus from which said reception stop means stopped halfway to receive said division part to request a reception remnant part which is a part of said division part not received completely, said reception remnant part request information including said content identification information, and said

reception end position and division end position of said division part not received completely.

7. A content acquisition program for causing information processing apparatus to execute:

a request information transmission step of transmitting request information to an external section in response to a request for content data, said request information requesting address information of a plurality of content provision apparatus capable of providing said content data, and data size information of said content data;

an information reception step of receiving from said external section said address information of said plurality of content provision apparatus capable of providing said content data, and said data size information of said content data, after transmitting said request information;

a division position determination step of determining division start positions and division end positions specifying division parts of said content data to request said content data in divided form from said plurality of content provision apparatus, based on the number of pieces of said address information and said data size information received by said information reception step;

a division part request information transmission step of transmitting division part request information including content identification information of said content data, and said division start positions and division end positions of said division parts of said content data, such that each said division part is requested from different said content provision apparatus;

a division part reception step of receiving said division parts from said plurality of content provision apparatus after transmitting said division part request information;

a temporarily storing step of temporarily storing said division parts received by said division part reception step; and

a data restoring step of combining said division parts temporarily stored by said temporarily storing step to restore said content data.

8. A content acquisition system including a plurality of content provision apparatus providing content data and content acquisition apparatus acquiring said content data from said plurality of content provision apparatus, the content acquisition system wherein:

said content acquisition apparatus includes:

request information transmission means for transmitting request information to an external section in response to a request for said content data, said request information requesting address information of said plurality of content provision apparatus capable of providing said content data, and data size information of said content data;

information reception means for receiving from said external section said address information of said plurality of content provision apparatus capable of providing said content data, and said data size information of said content data, after said request information transmission means transmits said request information;

division position determination means for determining

division start positions and division end positions specifying division parts of said content data to request said content data in divided form from said plurality of content provision apparatus, based on the number of pieces of said address information and said data size information received by said information reception means;

division part request information transmission means for transmitting division part request information including content identification information of said content data, and said division start positions and division end positions of said division parts of said content data, such that each said division part is requested from different said content provision apparatus;

division part reception means for receiving said division parts from said plurality of content provision apparatus after said division part request information transmission means transmits said division part request information;

temporarily storing means for temporarily storing said division parts received by said division part reception means; and

data restoring means for combining said division parts temporarily stored by said temporarily storing means to restore said content data; and

said content provision apparatus includes:

division part request information reception means for receiving said division part request information from said content acquisition apparatus;

division means for dividing said content data corresponding to said content identification information to extract said division part from between said division start

position and division end position of said content data in response to said division part request information received by said division part request information reception means, said content identification information, said division start position, and said division end position being shown in said division part request information; and

division part transmission means for transmitting to said content acquisition apparatus said division part divided from said content data by said division means.